

CLAIMS

What is claimed is:

1           1.     A method for adjusting a binder laylength, the method  
2     comprising:  
3           positioning a plurality of buffer tubes with respect to each other  
4     wherein each buffer tube houses a plurality of fiber optic bundles;  
5           placing a detectable binder around one of the plurality of fiber optic  
6     bundles, wherein the detectable binder contains a physically detectable  
7     feature;  
8           detecting the detectable binder;  
9           calculating a distance value between at least two detectable points on  
10    the detectable binder;  
11          comparing the distance value to a stored value; and  
12          adjusting the binder laylength according to the difference between the  
13    distance value and the stored value while an operation is in progress.

1           2.     The method for adjusting a binder laylength of Claim 1,  
2     wherein the binder's physically detectable feature is a fluorescing element.

1           3.     The method for adjusting a binder laylength of Claim 1,  
2     wherein the binder's physically detectable feature is a color.

1        4.        The method for adjusting a binder laylength of Claim 1, wherein the  
2        binder's physically detectable feature is a magnetic or metal strip.

1        5.        The method for adjusting a binder laylength of Claim 1, wherein the  
2        binder's physically detectable feature is an identifiable marking.

1        6.        The method of adjusting the binder laylength of claim 1, wherein the  
2        said positioning step includes positioning the buffer tube around a central  
3        strength member.

1        7.        A method for determining a binder laylength, the method comprising:  
2        positioning a plurality of buffer tubes with respect to each other wherein each  
3        buffer tube houses a plurality of fiber optic bundles;  
4        placing a detectable binder around one of the plurality of fiber optic bundles,  
5        wherein the detectable binder contains a physically detectable feature;  
6        detecting the detectable binder; and  
7        calculating a distance value between at least two detectable points on the  
8        detectable binder.

1        8.        The method for determining a binder laylength of Claim 7, the method  
2        further comprising:  
3        comparing the distance value to a stored value; and

4           adjusting the binder laylength according to the difference between the  
5           distance value and the stored value while an operation is in progress thus  
6           resulting in the binder laylength being evaluated and adjusted on line.

1           9.       The method for determining a binder laylength of Claim 7, wherein the  
2           binder's physically detectable feature is a fluorescing element.

1           10.      The method for determining a binder laylength of Claim 7, wherein the  
2           binder's physically detectable feature is a color.

1           11.      The method for determining a binder laylength of Claim 7, wherein the  
2           binder's physically detectable feature is a magnetic or metal strip.

1           12.      The method for determining a binder laylength of Claim 7, wherein the  
2           binder's physically detectable feature is an identifiable marking.

1           13.      The method for determining a binder laylength of Claim 7, wherein  
2           said positioning step includes positioning the buffer tubes around a central  
3           strength member.

1 14. A strander for manufacturing a fiber optic cable wherein the fiber optic  
2 cable has at least one buffer tube housing a plurality of fiber optic bundles, the  
3 strander comprising:

4 a binder wrapper for placing a detectable binder around the fiber optic  
5 bundles wherein the detectable binder has a physically detectable feature;

6 a detector for detecting the physically detectable feature; and

7 a value unit for calculating a distance value between at least two  
8 detectable points associated with the physically detectable feature on the  
9 detectable binder.

1 15. The strander of Claim 14 further comprising;

2 a computer for calculating a difference value by comparing the  
3 distance value to a stored binder laylength parameter and thus adjusting the  
4 binder according to the difference value while the stranding operation is in  
5 progress thereby resulting in the binder laylength being evaluated and  
6 adjusted on line.

1 16. The strander of Claim 14, wherein the binder's physically detectable  
2 feature is a fluorescing element.

1 17. The strander of Claim 14, wherein the binder's physically detectable  
2 feature is a color.

1 18. The strand of Claim 14, wherein the binder's physically detectable  
2 feature is a magnetic or metal strip.

1 19. The strand of Claim 14, wherein the binder's physically detectable  
2 feature is an identifiable marking.

1 20. A fiber optic cable binder comprising:  
2 a flexible material; and  
3 a physically detectable feature within the flexible material.

1 21. The fiber optic cable binder of Claim 20, wherein the binder's  
2 detectable feature is detected by a detection system.

1 22. The fiber optic cable of Claim 20, wherein the binder's physically  
2 detectable feature is a fluorescing element.

1 23. The fiber optic cable of Claim 20, wherein the binder's physically  
2 detectable feature is a color.

1 24. The fiber optic cable of Claim 20, wherein the binder's physically  
2 detectable feature is a magnetic or metal strip.

1        25.    The fiber optic cable of Claim 20, wherein the binder's physically  
2        detectable feature is an identifiable marking.

1        26.    A buffer tube comprising of:  
2                a plurality of individual optic fibers located within the buffer tube and  
3        arranged in a plurality of fiber optic bundles; and  
4                a detectable binder having an adjustable laylength wherein the  
5        detectable binder surrounds the fiber optic bundle.

1        27.    The buffer tube of Claim 25, wherein the binder is detectable due to a  
2        fluorescing element.

1        28.    The buffer tube of Claim 25, wherein the binder is detectable due to a  
2        distinguishing color.

1        29.    The buffer tube of Claim 25, wherein the binder is detectable due to a  
2        magnetic or metal strip.

30.    The buffer tube of Claim 25, wherein the binder is detectable due to a  
an identifiable marking.